

Outdoor 300Mbps Wireless N Access Point - 2T2R 5GHz

R300WN22OP5 / R300WN22OP5G / R300WN22OP5E



*actual product may vary from photos

DE: Bedienungsanleitung - de.startech.com

FR: Guide de l'utilisateur - fr.startech.com

ES: Guía del usuario - es.startech.com

IT: Guida per l'uso - it.startech.com

NL: Gebruiksaanwijzing - nl.startech.com

PT: Guia do usuário - pt.startech.com

For the most up-to-date information, please visit: www.startech.com

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This Class [B] digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

Industry Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limit set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Déclaration d'exposition à la radiation:

Cet équipement respecte les limites d'exposition aux rayonnements IC définies pour un environnement non contrôlé. Cet équipement doit être installé et mis en marche à une distance minimale de 20 cm qui sépare l'élément rayonnant de votre corps.

L'émetteur ne doit ni être utilisé avec une autre antenne ou un autre émetteur ni se trouver à leur proximité.

IC statement: CAN ICES-3 (B)/NMB-3(B)

FCC ID: VYTLP-2596K

IC: 11232A-R300WN22OP5

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Important Notice

This product **MUST** be installed by a professional installer who is familiar with local building and safety regulations, where appropriate, and is licensed by applicable authorities. The professional installer is responsible for making sure grounding is available and that it meets the relevant local and national electrical codes. Failure to employ a professional installer may render the product warranty void and it may also expose the end user or service provider to legal and financial liabilities. StarTech.com expressly disclaims any and all liabilities for injury, damage, or violation of regulations due to improper installation of outdoor units or antennas.

Always remember to protect the AP by installing grounding lines as it is necessary to protect your outdoor installations from lightning strikes and the build-up of static electricity. The AP must be grounded properly before powering up, as direct grounding of an outdoor AP is critical and must be done correctly to protect your networks from harsh outdoor environments and destructive ESD surge.

CAUTION: Be sure that earth grounding is available and that it meets local and national electrical codes. If in doubt always consult with a qualified electrician to make sure the outdoor installation is properly grounded. For additional lightning protection, lightning rods, lightning arrestors or RJ45 surge protectors may be used to compliment the installation.

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Introduction

Packaging Contents

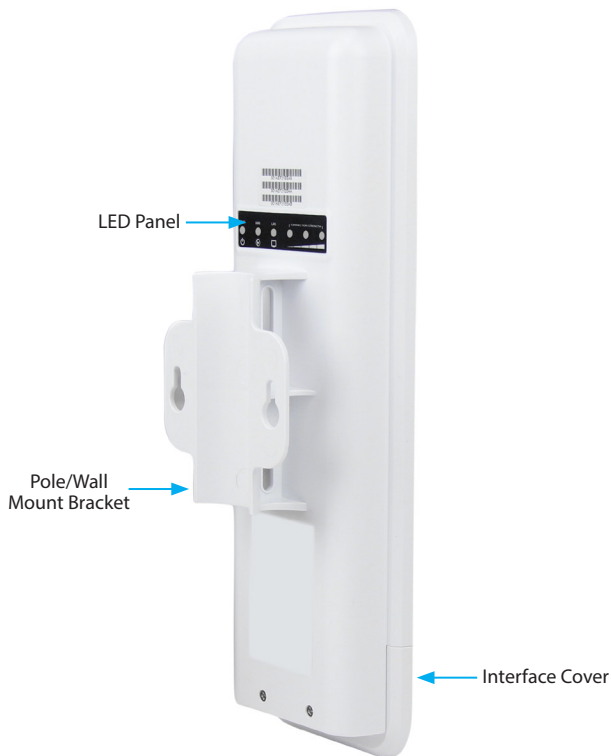
- 1 x Outdoor Access Point
- 1 x PoE Injector
- 1 x Metal Hose Clamp
- 1 x Power Adapter
- 1 x Instruction Manual

System Requirements

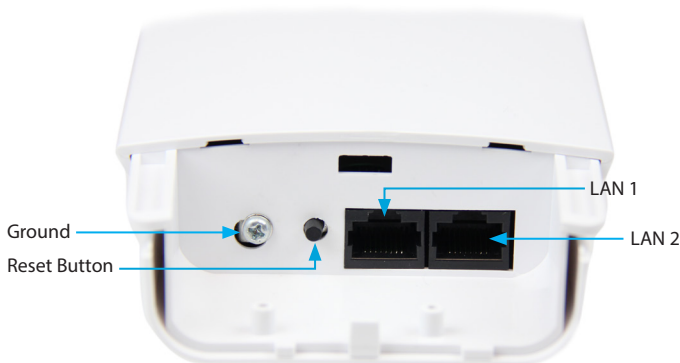
- A networked computer system with a Java-enabled web browser (for configuration)
- Cat 5 (or better) network cabling from PoE Injector to Wireless AP and PoE Injector to LAN Switch/router (no more than 100m total)
- Mounting screws / anchors for wall mounting PoE Injector and/or Wireless AP

Product Overview

Rear View



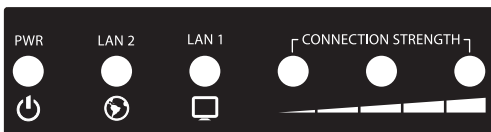
Connection Ports



Interface	Description
Reset Button	Press continually for 5 ~ 10 seconds to reset the device to factory defaults
LAN 1	Allows LAN connection through a Category 5 (or better) cable. Supports auto-sensing for 10/100Mbps speeds and half/ full duplex
LAN 2	Allows LAN connection through a Category 5 (or better) cable. Supports auto-sensing for 10/100Mbps speeds and half/ full duplex

Note: The reset button on the PoE injector will only work if plugged into the LAN 1 port.

LED Indicators



Indicator	State	Description
PWR	ON	The device is powered on
	OFF	The device is powered off
WAN	ON	Link detected
	OFF	No link detected
	Flashing	Data is being transmitted / received on the WAN interface
LAN	ON	Link detected
	OFF	No link detected
	Flashing	Data is being transmitted / received on the LAN interface
Wifi Activity Indicators	ON	Wireless client(s) are connected. Shows signal strength for best connected client/AP
	OFF	No connected wireless client(s)

Installation

Preparing Your Site

1. Determine the location for the included PoE injector and mount using the appropriate screws/anchors for the material you are mounting to (not included).
2. Determine the location for the Wireless AP. If you are pole-mounting the AP, use the included clamp to secure the device. If you are wall mounting the AP, use the appropriate screws/anchors for the material you are mounting to (not included).
3. Prepare/purchase the required length of Ethernet cabling to go from the PoE Injector to your LAN Switch or router, and from PoE Injector to the AP.

Note: The total length of Ethernet cabling from the Wireless AP to your LAN switch or router should not exceed 100m

Hardware Installation

1. Connect the included power adapter to an available wall outlet and the DC jack on the PoE injector.
2. Connect an Ethernet cable from the LAN port of the PoE Injector to your LAN switch or router.
3. Connect a second Ethernet cable from the PoE port of the PoE Injector, the other end of this cable will connect to the AP as instructed in the following steps.
4. Slide the bottom cover of the unit down to remove it and expose the ports.
5. Connect the Ethernet cable from the PoE port of the PoE Injector, to the LAN port on the AP (farthest from the reset button).
6. Slide the cover back on as shown.



Note that the AP may take approximately 50 seconds to complete the power on sequence.

Operation

The following steps outline the basic configuration for the AP. For details on the Advanced configuration options available, please visit www.StarTech.com/R300WN22OP5 for the full manual

Default Settings

Default IP Address: **192.168.1.200**

Default subnet mask: **255.255.255.0**

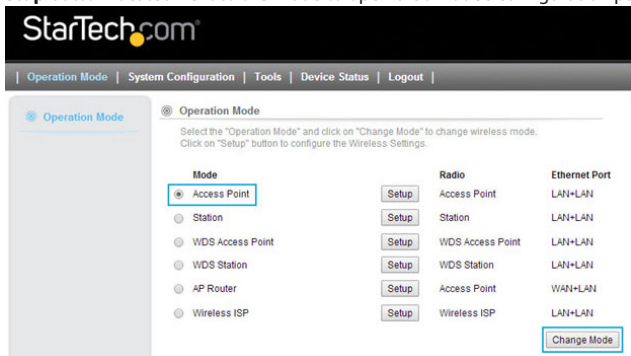
Web / Telnet User Name: **admin**

Web / Telnet Password: **admin**

1. Configure a system to be on the same LAN as the AP (192.168.1.xxx, where xxx is 1 – 254, except 200).
2. Open a web browser and enter the IP address **192.168.1.200** into the address bar, then press Enter.

3. Enter the default username / password (**admin / admin**) and press Enter.
4. Select your desired Operation Mode and click the **Change Mode** button to apply the change.

Note: The **Change Mode** button will automatically jump you to the **Operating Mode Settings** page for the mode you have selected. In future visits to the web interface, use the **Setup** button located next to the mode to open that mode's configuration page.



Available Network / IP Modes

Network Mode	Description
Access Point	Connects to an internal network (LAN) and broadcasts a wireless network connection (WLAN)
Station	Acts as a wireless client, to connect a remote segment to an existing WLAN
WDS Access Point	Acts as the main base station for a Wireless Distribution System mesh network
WDS Station	Acts as a remote base station in a Wireless Distribution System mesh network
AP Router	Connects an external network (WAN) with an internal network (LAN/WLAN), to allow cross-communication
Wireless ISP	Connects to an external wireless network (Wireless ISP) and rebroadcasts as an internal wireless network (WLAN).

Note: Depending on the mode you choose, applicable settings will be enabled/disabled automatically.

- From the Settings menu for each mode, you can access the applicable Wireless and Security settings. To configure wireless security, click the **Setup** button beside the Security option.

Note: It is strongly recommended to configure security, to avoid unwanted access to your wireless network.

The screenshot shows the StarTech.com web interface. At the top, there's a navigation bar with links: Operation Mode, System Configuration, Tools, Device Status, and Logout. The main content area is titled 'Operation Mode Settings'. On the left, there's a sidebar with 'Operation Mode' and 'Access Point'. The main settings area includes the following options:

- Regulatory Domain:** United States (dropdown)
- Network ID (SSID):** R300WN22 (text input) with a 'Site Survey' button.
- ☒ Enable Wireless
- ☒ Disable SSID Broadcasting
- ☐ Enable Isolated
- Radio Mode:** 5G 11NA HT40 (dropdown)
- Channel:** 100 -5500MHz (dropdown)
- Data Rate:** Auto (dropdown)
- Security Setting:** Setup (dropdown, highlighted with a red box)
- Transmit Power:** 27 dbm (dropdown)
- Transmit Distance:** 1 Km (dropdown)
- TDMA:** Disable (dropdown)
- DFS Control:** Enable (dropdown)
- DFS Domain:** FCC (dropdown)
- Advanced Settings:** Setup (button)
- Access Control:** Setup (button)

At the bottom right, there is a 'Save & Restart' button. A note at the bottom states: 'NOTE: To access the wireless network, user must have correct SSID and encryption key, if enabled.'

- Click the **Save & Restart** button once you have finished configuring the device to apply the settings.
- Select the **System Configuration** menu from the top of your screen to access IP, System Time, Password and other settings / tools.

Device IP Settings

Time Settings

Password Settings

System Management

Ping Watchdog

Firmware Upgrade

Configuration Save and Restore

Factory Default

Reboot System

Device IP Settings

You can select one of the following two approaches to assign an IP address to this device.

IP Address:	192	168	1	200
IP Subnet Mask:	255	255	255	0
Gateway IP Address:	192	168	1	200
Primary DNS Server:	192	168	1	1
Secondary DNS Server:	8	8	8	8

Save & Restart

NOTE: Changes to this page will not take effect until you click Save & Restart on the save config page.

8. To restrict access to the web interface of your AP, it is also recommended to configure a password, which can be done by selecting **Password Settings** from the left column of the web interface. Click the **Save & Change** button to apply your changes.

Device IP Settings

Time Settings

Password Settings

System Management

Ping Watchdog

Firmware Upgrade

Configuration Save and Restore

Factory Default

Reboot System

Password Settings

Change Password

To change your administrative password, enter your current password and then the new password twice.

Current Password:	
New Password:	
Re-enter New Password:	

Save & Change

Specifications

Supported Wireless Standards	IEEE802.11 a/n
Chipset	Atheros - AR9344
Connectors	2 x RJ45 Ethernet Female
Antenna Configuration	2x2:2 (TxR:s)
Antenna Type	14dBi Dual Polarization Directional Antenna
Wireless Frequency Range	5.150GHz ~ 5.850GHz
Wireless Bandwidth	20/40MHz
Wireless Encryption Supported	64/128 bit WEP WPA(TKIP with IEEE 802.1x) WPA2(AES with IEEE 802.1x) WPA -PSK
Maximum Wireless Distance	3km*
Maximum Data Transfer Rate	802.11n : (40MHz) : up to 300Mbps 802.11n : (20MHz) : up to 144Mbps RJ45 Ethernet: 10/100 Mbps
Enclosure Material	Plastic
Operating Temperature	0°C to 70°C (32°F to 122°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	95% @ 55°C
Dimensions	282 x 80 x 55 mm

Note: The effective distance will vary based on the transmitting power of the connecting wireless device(s).

Technical Support

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit **www.startech.com/support** and access our comprehensive selection of online tools, documentation, and downloads.

For the latest drivers/software, please visit **www.startech.com/downloads**

Warranty Information

This product is backed by a two year warranty.

In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

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